

they are state officers, and their entire time must be devoted to this duty. The advantages of this plan are so manifest, and it has received such ample discussion, that it is strange that we still cling to the old and insufficient method. The toxicological part of the work is particularly complete, and very great attention has evidently been bestowed upon it. The chapter on insanity, in contrast to that on toxicology, is very brief and inadequate, but it contains considerable information which will be of service to the beginner. A short chapter on medical malpractice, and one on life insurance, completes the work. Besides being of value to all medical students who wish to master the rudiments of medical jurisprudence, the book can also be recommended to the advanced student who may desire to refresh his memory upon forgotten, fundamental principles. The index is a particularly full one, and greatly enhances the value of the work.

G. W. JACOBY.

Topographical Anatomy of the Brain. By J. C. DALTON, M.D., Professor Emeritus of Physiology in the College of Physicians and Surgeons, New York; and President of the College. 3 vols. 4to. Philadelphia: Lea Brothers & Co., 1885.

The methods of studying the brain have suffered many changes. Not content with the knowledge to be obtained from gross anatomical preparations, anatomists took refuge in the microscope and carefully studied the thousands of sections into which the brain had been divided. Some eight or ten years ago, Flechsig published his embryological (developmental) method, which at the time promised startling results. More recently the experimental (atrophy) method has had its praises sung by Gudden, Forel, and v. Monakow.

Prof. Dalton's volumes come to us as a reminder that the oldest, purely anatomical method is still worth pursuing; that its resources are not yet exhausted, and that much may be learned from such sections as are here presented.

The work before us is essentially an atlas and not a text-book. The author evidently started out with the intention of making it both; for, upon the introductory remarks follows a remarkably lucid statement of the configuration of the hemispheres. For some reason unknown to us, he does not treat of other parts of the brain in the same happy manner. The remainder of the text contains nothing more than an explanation of the various plates.

By these plates the book must be judged. Their artistic excellence was secured by the skill of the photographer, Mr. Mason, to whom especial praise is due. We do not remember ever to have seen more faithful representations of the external appearance of the brain than those given on the first three plates of Series *A*, and on the series *B*, of horizontal sections, the gray and the white masses are differentiated with astounding clearness.

In the introduction to these volumes, the author gives a detailed account of the manner in which these sections were prepared. After careful injections of the ventricular cavities with a warm solution of gelatine, the whole mass of the brain was imbedded in

an apparatus so constructed as to allow of a large number of sections being made, all of which sections are of equal dimensions. (For further particulars see p. 7, etc., of book.) From these cuts a certain number were selected for reproduction. The author has shown good judgment in the selection of these views. From each picture some instruction may be got. By far the most interesting sections are those of the second (horizontal) series. Strangely enough horizontal sections of the brain have been studied far less carefully than either longitudinal or vertical cuts. This applies to microscopical investigations as well. In his excellent chapter on the mammalian brain in Striker's "Handbook of Histology," Meynert has given but two or three horizontal sections; Wernicke ("Lehrbuch der Gehirnkrankheiten") gives three horizontal sections through the monkey's brain, and none from man. On the other hand it was a notable feature of Dr. Spitzka's paper¹ on the lemniscus, that he departed from this custom in giving a number of highly instructive horizontal sections.

Each plate in the atlas is explained by an outline drawing on an opposite or neighboring page. These tracings are capital guides to a careful study of each and every plate. In regard to the nomenclature we notice that the author has not departed from ancient usage. We have the various parts of the central organ designated in the good old-fashioned way. The plates are, beyond a doubt, more intelligible to the average reader than if these time-honored designations had been crowded out by odd-sounding, unfamiliar, though possibly more correct, technical terms. Of these diagrammatic explanations one thing may be said, and that is, that they do not in every instance take into account all that the plates show. On plate VII., series *B*, the occipital radiations are brought out with unusual distinctness, yet no reference is made to them in the outline drawing. On plate XII., series *C*, those who are familiar with microscopical sections of the brain will recognize the posterior longitudinal fasciculus and the lemniscus of each side; but they are not alluded to in the accompanying diagram. Prof. Dalton ought to have pointed to these formations with particular pride, for the fact that they are visible on such views as these proves the excellence of the reproductions.

The mysteries of the pons and the medulla oblongata could never have been solved by this (gross) sectional method; and yet those to whom microscopical sections of these divisions of the brain are most familiar will enjoy seeing how distinctly their connections, with the cerebellum in particular, are brought out on plates XII. and XIII. of series *B*.

Enough has been said to assure those interested in brain-anatomy, that a study of these plates will prove both instructive and refreshing.

When we shall have added that the press-work is perfect, the paper elegant, and the volumes not too unwieldy in size, we may

¹ *N. Y. Med. Record*, 1884.

well desist from further praise. The teacher of anatomy will find it advantageous to use these plates for purposes of demonstration, but he ought to be privileged to re-arrange the plates to suit himself, so as to be able conveniently to exhibit horizontal and vertical sections side by side. We understand that a very limited edition of this work has been published. We trust that the author and publishers may see fit to issue another and larger edition before long.

B. S.

Treatise on Therapeutics. Comprising *Materia Medica* and *Toxicology*, with Special Reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. WOOD, M.D., Professor of *Materia Medica* and Therapeutics in the University of Pennsylvania, etc. Fifth edition, revised and enlarged. Philadelphia : J. B. Lippincott & Co., 1883, pp. 740.

Whether an author is to be envied in having to re-issue a work after scarcely six months' time, may be an open question. Certainly this fact alone is sufficient to show the esteem in which such a book is held ; and when to this fact the author in a very brief preface tells us that he has by this been stimulated to render the volume, as far as lay in his power, worthy of the kind judgment and continued favor of his co-laborers, then we may rest assured that the book before us presents the newest and broadest thoughts and facts in therapeutical science. At this late day a review of the work is entirely superfluous, and that which has been said about the fourth edition will also apply to this one. New and insufficiently tried drugs and reported new actions of old ones have, with Dr. Wood's wonted conservatism, been entirely ignored or only slightly referred to. This, in the eyes of many, will appear a virtue instead of a fault, but even since the appearance of this fifth edition, the action of certain drugs has attracted the attention of the medical world, which, in the next revision of the work, will have to receive attention. In turning over its familiar leaves it becomes noticeable that, particularly in the parts treating of the physiological action of drugs, facts follow facts with such bewildering rapidity that the study of page after page becomes an absolute necessity. It would be invidious to specify any part of the work as better than the rest. The entire work is one which can receive unreserved recommendation to both students and practitioners.

G. W. JACOBV.

Zur Einleitung in die Elektrotherapie. By Dr. C. W. MÜLLER. Wiesbaden, 1885. J. F. Bergmann.

The title of this little book is somewhat misleading, but in a way that does great credit to its author. It is not an introduction to electro-therapeutics after the manner of other works with similar titles ; it is a strictly scientific treatise on some of the most intricate problems suggested by the application of electricity to the human body. Dr. Müller is a practising physician at Wiesbaden, who, as the book proves, has not only had a vast experience in